Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A process for forming a multilayer three-dimensional structure, comprising:

(a) forming and adhering a layer, comprising a plurality of materials, to a previously formed layer or to a substrate;

(b) repeating the forming and adhering of (a) at least once to build up a three-dimensional structure from a plurality of adhered layers;

wherein the forming of at least one of the plurality of adhered layers, comprises:

(1) obtaining a selective pattern of deposition of a first metal material having at least one void, comprising at least one of:

(a) selectively electrodepositing a first metal material onto a substrate or previously formed layer such that at least one void remains; or

(b) electrodepositing a first metal material onto a substrate or previously formed layer and selectively etching the deposit of the first material to form at least one void therein; and

(2) depositing a second material into the at least one void via a thermal spraying process.; and

(c) after forming the plurality of layers removing the first metal material from the plurality of layers to reveal the three-dimensional structure.

Claim 2 (previously presented): The process of claim 1 additionally comprising performing at least one planarization operation during the forming of each of at least a portion of the plurality of adhered layers.

Claim 3 (original): The process of claim 1 wherein the thermal spraying process comprises at least one of: (1) an arc wire spraying process, (2) a high velocity oxygen-

fuel (HVOF) spraying process, (3) a plasma spraying process, (4) a plasma transferred arc (PTA) spraying process, (5) a vacuum or low pressure plasma spraying process, (6) a low velocity oxygen-fuel (LVOF) spraying process, (7) a detonation thermal spraying process, (8) a high velocity particle consolidation (HVPC) spraying process, (9) a wire spraying process, or (10) an ion plating process.

Claim 4 (previously presented): The process of claim 1 wherein the depositing via a thermal spraying process, during the forming of at least one layer, results in a porous deposit of the second material and thereafter infiltrating a third material into at least a portion of the pores in the second material.

Claim 5 (currently amended): The process of claim 1 wherein after depositing via a thermal spraying process, during the forming of at least one layer, performing at least one subsequent operation so that at least one of: (i) modification of the second material occurs, or (ii) enhanced adhesion between the second material deposited in association with the at least one layer and material deposited in association with another layer ~~ocurr~~occurs.

Claim 6 – 22 (canceled).

Claim 23 (previously presented): The process of claim 1 wherein the forming of at least one of the plurality of adhered layers comprises forming of at least two layers of the plurality of adhered layers.

Claims 24 – 26 (canceled).

Claim 27 (currently amended): A process for forming a multilayer three-dimensional structure, comprising:

(a) forming and adhering a layer, comprising a plurality of materials, to a previously formed layer or to a substrate, wherein at least one of the plurality of materials comprises an electrodeposited metal material and at least another one of the

plurality of materials comprises (i) a material deposited via a thermal spraying process or (ii) a powder material prior to deposition;

(b) repeating the forming and adhering of (a) at least once to build up a three-dimensional structure from a plurality of adhered layers;

wherein the forming of one or more of the plurality of adhered layers, comprises:

(1) obtaining a selective pattern of deposition of a first material having at least one void, comprising at least one of:

(a) selectively depositing a first material onto a substrate or previously formed layer such that at least one void remains; or

(b) depositing a first material onto a substrate or previously formed layer and selectively etching the deposit of the first material to form at least one void therein; and

(2) depositing a second material into the at least one void; and

(c) after forming the plurality of layers removing the electrodeposited metal material from the plurality of layers to reveal the three-dimensional structure..

Claim 28 (previously presented): The process of claim 27 wherein the forming of at least one of the plurality of adhered layers comprises forming of at least two layers of the plurality of adhered layers.